

Distribution Integrity Management Program (DIMP)

Master Meter and Small Operators of Gas Distribution Systems

White County Housing Authority

Operator ID: **39072**
Operator: **WHITE COUNTY HOUSING AUTHORITY**
Address: **P.O. BOX 277, CROSSVILLE, IL 62827**
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Inspection Date: **5/29/2014**
States(s) included in this Inspection:

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Agency Representatives:

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Persons Interviewed:

Mike Wendling, Gas Engineer, 6183925502, mwending@usdi.us

Inspector Comments:

Staff conducted a review of the White County Housing Authority Distribution Integrity Management Plan ("DIMP"). The plan identified four areas of which Notices of Amendment ("NOA") were issued. These were (1) 192.1010 (b) (1) the maps do not indicate pipe materials.

The maps shall be updated to indicate the type of materials. (2) 192.1015 (b) (2) atmospheric corrosion is not identified as a sub threat under corrosion. Staff requests that atmospheric corrosion be added as a potential threat under corrosion. (3) 192.1015 © (1) the plan does not identify the retention interval for the records to be retained as part of the plan. Staff requests that the plan shall be revised to include the intervals for which the required records shall be retained. (4) 192.1015 © (3) the plan does not indicate the interval of retention for records that are required for maps and types of materials located in their systems.

Q. No.:	Rule Name:	Question	Answer	Details	Comments
1	192.1015(a)	Was the plan written and implemented per the requirement of 192.1015 by 08/02/2011?	Yes or Satisfactory	The plan was implemented by 8/2/2011.	
		or			
		For a gas system put into service or acquired after 08/02/2011, was a plan written and implemented prior to beginning of operation?			
2	Information Only	Were commercially available	Partially		No commercial
		product(s)/template(s) used in the development of the operator's written integrity management plan?		products were utilize in the development of the DIMP plan. USDI utilized the PHMSA templates and guidelines for Master Meter Operators to create the DIMP plan for White County Housing.	The created by the Operators consultant ("USDI") using the PHMSA template and guideline for DIMP plans.
		Commercial product(s)/templates name if used:			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
3	Information Only	Does the operator's plan assign Responsibility is responsibility, including titles and positions, of those accountable for developing and implementing required actions?		defined on page 5 of the plan.	Responsibility is defined on page 5 of the plan.
4	192.1015(b)(1)	Does the plan include a written System description explanation of the mechanisms or procedures to address how the operator will demonstrate knowledge of its pipeline which, to the extent known, should include the approximate location and material of its pipeline?	No or Unsatisfactory 4.	description is defined under Introduction and System Description on pages 7-8. Review of the system maps indicate pipe size and location but do not indicate material. Staff requests the maps to be revised to include materials as defined in the DIMP plan.	4. is defined under Introduction and System Description on pages 7-8. Review of the system maps indicate pipe size and location but do not indicate material. Staff requests the maps to be revised to include materials as defined in the DIMP plan. Due to this an NOA was issued to revise their maps to indicate what known materials are present in the systems operated by White County Housing.
5	Information Only	Do the written mechanisms or Electronic - Paper procedures indicate if the information was obtained from electronic records, paper records, or subject matter expert knowledge (select all which apply)?	Electronic - Paper - SME	and SME. The SME's utilized were their consultants with USDI.	Electronic - Paper and SME. The consultants with USDI.
6	192.1015(b)(1)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
time of		Does the plan include a written explanation of the mechanisms or procedures to identify additional information that is needed to fill gaps due to missing, inaccurate, or incomplete records?	Yes or Satisfactory	6. on page 5 of the plan under Management of Change and in #1 Knowledge of the system on page 7-8 for new information.	This is defined At the establishing the plan there were no known gaps. If new information is learned it shall be recorded and
incorporated into				At the time of establishing the plan there were no known gaps. If new information is learned it shall be recorded and incorporated into the DIMP plan.	the DIMP plan.
7	192.1015(b)(1)	Does the plan list the additional information needed to fill gaps due to missing, inaccurate, or incomplete records?	Yes or Satisfactory	There were no known gaps identified during the initial writing of the DIMP Plan. If new information is identified it shall be incorporated into the plan. The process for reporting new information is defined on page 5 under Management of Change and in #1 Knowledge of the System on page 7-8 of the plan.	
8	192.1015(b)(1)	Do the written mechanisms or If new information is procedures specify the means to collect the additional information over time through normal activities conducted on the pipeline (e.g. design, construction, operations or maintenance activities)?	Yes or Satisfactory	page 5 of the plan under Management of Change and in #1 Knowledge of the system on page 7-8. If new information is established it shall be communicated, recorded and incorporated into the plan.	This is defined on established it shall be communicated, recorded and incorporated into the plan.
9	192.1015(c)(3)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Do the written mechanisms or If new information is procedures require the capture and retention of data on any new pipeline installed?	Yes or Satisfactory	page 5 of the plan under Management of Change and in #1 Knowledge of the system on page 7-8. If new information is established it shall be communicated, recorded and incorporated into the plan.	This is defined on established it shall be communicated, recorded and incorporated into the plan.
10	192.1015(c)(3)	Does the captured and retained data 10. on any new pipeline include, at a minimum, the location where the new pipeline is installed and the material from which it is constructed?	Yes or Satisfactory No new piping	been installed since the plan was established and no new information has been identified. The main and service pressure test form located in their O&M requires the location and type of material to be recorded. This document is located in Section 6 of the White County O&M.	No new piping has been installed since the plan was established and no new information has been identified. main and service pressure test form located in their O&M requires the location and type of material to be recorded. document is located in Section 6 of the White County O&M.
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11	192.1015(b)(1)	Has the operator demonstrated an Understanding SME's, understanding of its pipelines, which, to the extent known, should include the approximate location and material of its pipelines?	Yes or Satisfactory	historical piping information and documentation indicates the operator has established knowledge of the system. This information is also documented on the system maps utilized by their field personnel.	Using SME's, historical piping information and documentation indicates the operator has established knowledge of the system. This information is also documented on the system maps utilized by their field personnel.
12	192.1015(b)(2)	In identifying threats, do the written mechanisms or procedures include consideration of the following categories of threats to each gas distribution pipeline?			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Corrosion	No or Unsatisfactory	<p>External corrosion threat is considered in #2 Identify Threats located on page 8 of the plan.</p> <p>Atmospheric corrosion has not been reviewed as an applicable sub threat under corrosion. Staff requests that Atmospheric Corrosion be reviewed as a potential threat.</p>	<p>The plan does not include sub threats under corrosion or natural forces. Staff requests that the operator include sub threats under each applicable threat.</p>
		Natural Forces	Yes or Satisfactory	<p>Natural forces threat is considered in #2 Identify Threats on pages 8-9 of the plan. Due to the systems operating at inches of water column, there are no service regulators in the White County systems other than the master meter installation owned and operated by the supplying municipal system. Staff request that the DIMP plan indicate there are no service regulators located in the systems operated by White County Housing.</p>	
		Excavation Damage	Yes or Satisfactory	<p>Excavation threat is considered in #2 Identify Threat on page 9. White County is a member of JULIE and owns the property on which their facilities are located.</p>	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Other Outside Force Damage	Yes or Satisfactory	Other Outside forces are considered on pages 9-10 and no applicable threats were identified under this category.	
		Material or Weld Failure	Yes or Satisfactory	Material and welds is considered on page 10 but there has been no indications of leakage due to these threats.	
		Equipment Failure	Yes or Satisfactory	Equipment is considered as a threat on page 10 of which valves are only equipment located in their systems. There are no service regulators in the White County Systems and the Municipal systems own and operate the master meter pressure regulating equipment which are generally large service regulator type installations with internal relief devices.	
		Incorrect Operation	Yes or Satisfactory	This is considered as a threat on page 10 but there is no equipment other than valves that could affect the operation of the system.	

13 192.1015(b)(2)

Q. No.:	Rule Name:	Question	Answer	Details	Comments
reviewed the		Did the operator consider the information that was reasonably available to identify existing and potential threats?	Yes or Satisfactory	information and documentation available to the operator indicates the operator utilized the available system information to identify existing and potential threats. Staff reviewed the documentation utilized such as system maps, valve inspection history, leak survey, odorization monitoring, pipeline patrols and continuing surveillance records, external corrosion and atmospheric corrosion.	Review of the Staff documentation utilized such as system maps, valve inspection history, leak survey, odorization monitoring, pipeline patrols and continuing surveillance records, external corrosion and atmospheric corrosion.
14	192.1015(b)(2)	Does the documentation provided by the operator demonstrate implementation of the element "Identify Threats"?	Yes or Satisfactory	The documentation utilized by the operator demonstrates the element of identify threats.	The documentation utilized by the operator demonstrates the element of identify threats.
15	Information Only	Was the risk evaluation developed fully SME knowledge was or in part using a commercially available tool? Commercial tool name if used:	Not at all	was utilized by the operator to establish the likelihood and consequence of the applicable threat to evaluate risk. This is defined in (a) Consider Likelihood and (b) Threat Consequences of #3 of the plan on pages 10-11.	SME knowledge utilized by the operator to establish the likelihood and consequence of the applicable threat to evaluate risk. defined in (a) Consider Likelihood and (b) Threat Consequences of #3 of the plan on pages 10-11.
This is					
16	192.1015(b)(3)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
17	192.1015(b)(3)	Do the written mechanisms or The procedure used procedures contain the method used to determine the relative importance of each threat and estimate and rank the risks posed?	Yes or Satisfactory		The procedure
		Briefly describe the method.		used to determine the relative importance of each threat and rank the risk posed is defined in #3 of the plan on	to determine the relative importance of each threat and rank the risk posed is defined in #3 of the plan on page 11.
		Did the operator validate the results generated by the risk evaluation model/method?	Yes or Satisfactory	prioritize risk is defined in (a) and (b) of #3 of the plan on pages 10-11. Risk and Threat prioritization is accomplished using both leakage and consequence probability.	Evaluate and Risk
18	192.1015(b)(3)	Does the documentation provided by the operator demonstrate implementation of the element "Evaluate and Rank Risk"?	Yes or Satisfactory	Evaluation and ranking of risk is defined in (a) and (b) of #3 of the plan on pages 10-11.	
19	192.1015(b)(4)	Do the written mechanisms or 19. procedures identify when measures, beyond minimum code requirements specified outside of Part 192 Subpart P, are required to reduce risk?	Yes or Satisfactory Identification and	Implementation of Measures to Mitigate Risks is defined in #4 on pages 11-12 of the plan.	Identification and Implementation of Measures to Mitigate Risks is defined in #4 on pages 11-12 of the plan.
20	192.1015(b)(4)	When measures, beyond minimum Conduct patrols after code requirements specified outside of Part 192 Subpart P, are required to reduce risk, does the plan identify the measures selected, how they will be implemented, and the risks they are addressing?	Yes or Satisfactory	that exceed the minimum requirements of Part 192 defined in #4 of the plan on pages 11-14.	There are actions periods of excessive winds that have uprooted trees or after an earthquake to determine if the system has been damaged or affected.
22	192.1015(b)(4)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Does the documentation provided by Review of leak the operator demonstrate implementation of those measures to reduce risk required by Part 192 Subpart P?	Yes or Satisfactory	surveys, patrols, corrosion surveys and atmospheric corrosion inspections, continuing surveillance and odorometer testing indicate they are being performed as required by Part 192.	Review of leak surveys, patrols, corrosion surveys and atmospheric corrosion inspections, continuing surveillance and odorometer testing indicate they are being performed as required by Part 192.
23	192.1015(b)(5)	Does the plan contain written mechanisms or procedures for how the operator monitors the performance measure “number of leaks eliminated or repaired on its pipeline and their causes”?	Yes or Satisfactory	In #5 Measure Performance, Monitor Results and Evaluate Effectiveness on page 14, the operator has a procedure to record the number of hazardous leaks eliminated or repaired, keeping record of instances where the system is damaged by excavation and retaining of any piping or components that are replaced.	
24	192.1015(b)(5)				

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Did the operator monitor the USDI conducts the performance measure “number of leaks eliminated or repaired on its pipeline and their causes”?	Yes or Satisfactory	of #5 are monitored through review of leak survey documentation and customer leak reports received and responded to. USDI conducts the annual leak surveys on all the systems and responds to leak complaints reported by the customers or the public. They also perform any repairs that are performed on the system.	The requirements annual leak surveys on all the systems and responds to leak complaints reported by the customers or the public. They also perform any repairs that are performed on the system.
25	192.1015(b)(6)	Do the written mechanisms or Staff’s review procedures provide for determination of the appropriate period for conducting IM program evaluations based on the complexity of its pipeline and changes in factors affecting the risk of failure, not to exceed 5 years?	Yes or Satisfactory	established there is no requirement in the White County plan for the maximum interval of 5 years for conducting the IM Program evaluation.	Staff’s review established there is no requirement in the White County plan for the maximum interval of 5 years for conducting the IM Program evaluation. This was
corrected by				This was corrected by adding this to the plan during the audit.	
26	192.1015(b)(6)	Do the written mechanisms or No reviews have been procedures consider the results of the performance monitoring in the periodic IM program evaluation?	Yes or Satisfactory	#6 Periodic Evaluation and Improvement on page 14. No reviews have been required as of the time of this audit and the 5 year review will be due in 2016.	This is defined in required as of the time of this audit and the 5 year review will be due in 2016.
27	Information Only	Do the written mechanisms or There have been no procedures contain a process for informing the appropriate operating personnel of an update to the plan?	Yes or Satisfactory	Plan Responsibility and Management of Change on pages 5-6.	This is defined in changes that warrant notifications as of the date of this audit.

Q. No.:	Rule Name:	Question	Answer	Details	Comments
28	Information Only	Do the written mechanisms or procedures contain a process for informing the appropriate regulatory agency of a significant update to the plan?	Yes or Satisfactory	The notification for informing the ICC of revisions is included on page 6 in Plan Responsibilities and Management of Change.	
29	192.1015(b)(6)	Does the documentation provided by the operator demonstrate implementation of the element "Periodic Evaluation and Improvement"?	Yes or Satisfactory	This is defined in #6 on page 14 under Periodic Evaluation and Improvement as of the date of this inspection no new information has been identified on the system. The next 5 year review is due in 2016.	
30	192.1015(c)(1)	Does the operator have written mechanisms or procedures specifying the following records demonstrating compliance with Subpart P will be maintained for at least 10 years			
		A written IM plan in accordance with An NOA was issued 192.1015, including superseded IM plans?	No or Unsatisfactory	page 14 defines the records to be retained but does not indicate the retention period of 10 years. Staff requests the plan to be amended to include the retention interval and also include retention of past versions of the plan shall be retained.	#5 of the plan on pertaining to the requirement of 192.1015 © (1). There is currently no requirement for retaining past versions of the plan or certain records for a minimum of 10 years.
31	192.1015(c)(2)	Does the operator have written mechanisms or procedures specifying the following records demonstrating compliance with Subpart P will be maintained for at least 10 years			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Documents to support threat Staff requests that the identification?	No or Unsatisfactory		The plan does not
				currently define the retention interval for records utilized to support threat identification in #5 of the plan. Staff requests that the plan be revised to include the record retention interval of 10 years.	plan be revised to include the minimum record retention interval of 10 years.
32	192.1015(c)(3)	Does the operator have written mechanisms or procedures specifying the following records demonstrating compliance with Subpart P will be maintained for at least 10 years			
		Documentation showing the location The plan failed to and material of all pipe and appurtenances that are installed after the effective date of the operator's IM program and, to the extent known, the location and material of all pipe and appurtenances that were existing on the effective date of the operator's program?	Yes or Satisfactory		The plan does not
				currently define the retention interval for records that indicate the location and materials of all pipe and appurtenances that are installed after the effective date of the IM program. Staff requests the 10 year interval shall include the above system information.	indicate a requirement to maintain the necessary records for a minimum of 10 years. Staff issued an NOA requesting this requirement to be added to the plan.
33	192.1015(c)(3)	Has the operator maintained the Staff reviewed the leak required records?	Yes or Satisfactory		The operator has
				retained the required records as defined in C of 192.1015. Staff reviewed the leak survey, cathodic and atmospheric corrosion surveys, patrol's, continuing surveillance reports, odorization reports, valve inspections and leak repair records.	survey, cathodic and atmospheric corrosion surveys, patrol's, continuing surveillance reports, odorization reports, valve inspections and leak repair records.
34-1	192.1015(b)(4)	1. For the top five highest ranked risks from the operator's risk ranking list the following:			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation)	Natural forces		
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #)	Other	Prevent the possibility of a hazardous leak due to external corrosion.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk)		Survey areas after indications of high winds to detect possible damage or leakage.	
		Associated performance measure		Reduce the probability of hazardous leakage.	
34-2	192.1015(b)(4)	2. For the top five highest ranked risks from the operator's risk ranking list the following:			
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation)	Corrosion		
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #)		External corrosion on buried coated and steel piping.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk)		Perform annual leak surveys on the system to detect possible areas of leakage due to external corrosion. Correct indication of low potentials in a timely manner.	
		Associated performance measure		Prevent the possibility of a hazardous leak due to external corrosion.	
34-3	192.1015(b)(4)	3. For the top five highest ranked risks from the operator's risk ranking list the following:			

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation)	Excavation damage		There have been no instances of third party damage but the possibility is there even though the piping is located on private property under the control of the housing authority.
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #)	Failure to notify	White County is a member of JULIE but if an excavator were to dig without calling JULIE. USDI/White County Housing may not know of the excavation.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk)		Have White County personnel inform USDI of any observed excavations that take place without notice to allow for a follow-up inspection to be conducted.	
		Associated performance measure		Prevent the possibility of leakage due to third party excavation.	
34-4	192.1015(b)(4)	4. For the top five highest ranked risks from the operator's risk ranking list the following:			
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation)	Corrosion		There was one instance of atmospheric corrosion on a master meter outlet riser in Grayville but did not result in a hazardous leak. The riser has been replaced.
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #)	Atmospheric	Atmospheric corrosion on above ground piping.	

Q. No.:	Rule Name:	Question	Answer	Details	Comments
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk)		Inspect for atmospheric corrosion during the annual leak surveys.	
		Associated performance measure		Reduce the probability of leakage due to atmospheric corrosion.	
34-5	192.1015(b)(4)	5. For the top five highest ranked risks from the operator's risk ranking list the following:			
		Primary threat category (corrosion, natural forces, excavation damage, other outside force damage, material or weld, equipment failure, incorrect operation)	Natural forces		
		Threat subcategory (GPTC threat subcategories are acceptable. Try to be specific. Example, failing bonnet bolts of gate valve, manufacturer name, model #)	Seismic events	There have been instances of light earthquakes in the White County Area.	
		Measure to reduce the risk (list the one measure the operator feels is most important to reducing the risk)		Conduct leak surveys after the occurrence of a seismic event to ensure there was no damage to their systems.	
		Associated performance measure		Reduce the probability of a hazardous leak.	